

DIABETESpredict™

Sample collection:
Swab (buccal epithelial cells) or
EDTA tube (blood).
Results availability:
15 working days.

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DIABETESpredict™

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how to use, scan
the QR code:



*Genomics for type 2 diabetes
prevention & intervention*

DIABETESpredict™



From genetic risk assessment to diabetes clinical intervention

Patia has developed **DIABETESpredict™**, a forefront type 2 diabetes prevention and intervention platform.

DIABETESpredict™ analyzes 16 genetic variants and provides genotype-informed recommendations, guiding the physician in clinical and lifestyle intervention.

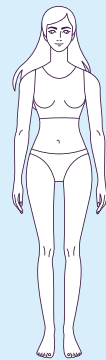
DIABETESpredict™ algorithm integrates the individual's ancestry, family history, and anthropometric variables.

Clinical Indications

Type 2 diabetes genetic risk assessment, prevention and intervention in high risk individuals and T2D patients:

- Overweight and Obesity (BMI ≥ 25 kg/m² in adults; BMI 85% percentile in children).
- Sedentary lifestyle.
- High blood sugar level (≥ 100 mg/dl).
- High glycosylated hemoglobin (A1C $\geq 5.7\%$).
- Type 2 diabetes family history.
- Clinical or family history of gestational diabetes mellitus.
- Type 2 diabetes patient to intervene with personalized treatment recommendations informed by the genotype.

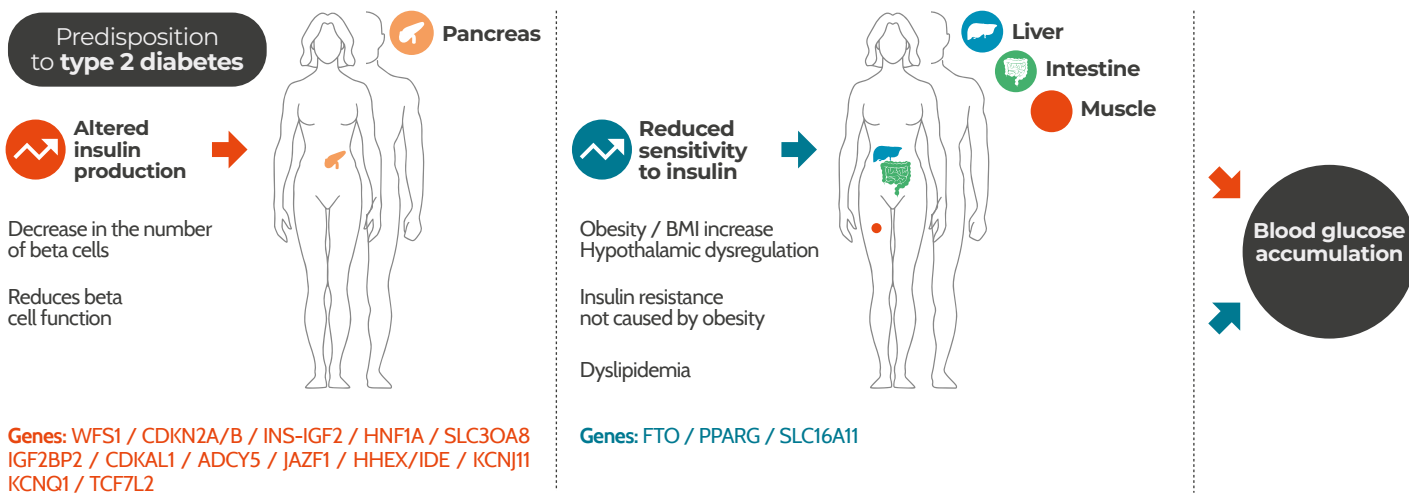
DIABETESpredict™



Sample ID: 23279QM
Name: Sara López
Gender: Female
Age: 38 years old
D.O.B: 30/03/1981
Ancestry: Western Europe
Parental history DT2: Positive
Body mass index: 29 kg/m²
FRCV: HTA
Other pathologies: Hyperglycemia
Stress: 2
Sleep: 6

Genes	Genotypes	
SLC16A11	G	G
INS-IGF2	C	C
HNF1A	G	G
WFS1	G	G
SLC30A8	A	G
PPARG	C	C
IGF2BP2	T	T
CDKAL1	A	G
ADCY5	C	C
JAZF1	G	G
HHEX/IDE	C	C
KCNJ11	C	T
KCNQ1	C	C
TCF7L2	C	T
FTO	C	C
CDKN2A/B	C	T

DIABETESpredict™



Genes: WFS1 / CDKN2A/B / INS-IGF2 / HNF1A / SLC30A8 / IGF2BP2 / CDKAL1 / ADCY5 / JAZF1 / HHEX/IDE / KCNJ11 / KCNQ1 / TCF7L2

Genes: FTO / PPARG / SLC16A11

Genotype-informed recommendations

The **DIABETESpredict™** results report provides specific recommendations informed by the genotype, guiding the physician with precise steps for intervention.

Nutrition:

Informed by the **TCF7L2** genotype, it's indicated a Mediterranean diet consisting largely of whole grains, lean proteins, olive oil, and moderate amounts of dairy products.

Due to the **CDKN2A/B** genotype grapes (high resveratrol content) and cod liver oil are recommended.

The diet should be rich in protein, reaching 60% of the daily intake and rich in eicosapentaenoic and docosahexaenoic acids (omega 3) in sardines, salmon, avocado.

Due to the **WFS1** genotype, lentils (high in the flavonoid genistein) and apples with skin (rich in polyphenols) are recommended due to the **FTO** genotype.

Physical exercise:

It is recommended to practice aerobic exercise (4 days a week, 30 minutes), due to the **CDKN2A/B** and **TCF7L2** genotype, combined with anaerobic exercise (3 days a week,

30 minutes) due to the **FTO** genotype. Pay attention to sleep hygiene and try to get 7-8 hours of restorative sleep at night.

Supplements:

DHA (omega 3), Vitamin A, Vitamin B complex, Potassium, Chromium, Probiotics.

Pharmacology:

Discuss with your physician the appropriateness of using Metformin after evaluation of HbA1c results, given the expected response to this drug due to the **FTO** genotype.

Consider sulfonylurea/meglitinide therapy given the expected response to these drugs due to expected response to these drugs due to the **KCNQ1** genotype.

Other laboratory tests:

HbA1c / Fasting blood glucose / Lipid and triglyceride panel / Liver function panel / Ask about appetite and satiety / Investigate renal function, vision and hearing.

Genotype-informed recommendations

DIABETESpredict™ results report offers specific recommendations based on genotype, guiding physicians with precise intervention guidelines.

Benefits of DIABETESpredict™

- ✓ Identification of type 2 diabetes high risk individuals with a painless buccal DNA sample
- ✓ Guidance and motivation to implement and follow up healthy lifestyle personalized diets and physical activity
- ✓ Family cascade to enable early intervention
- ✓ Close and continuous follow up of high risk individuals and patients with prediabetes or T2D Precision treatment of T2D patients

Scientific reliability

Developed in collaboration with scientist and endocri-nologists at **The Broad Institute of MIT and Harvard (Cambridge, USA)** and **The Massachusetts General Hospital (Boston, USA)**.

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